

What is claimed is:

1. A repair circuit, comprising:

5 a bit fail repair block for receiving column and row addresses to determine whether the addresses are fail addresses in order to decide whether bit repair for the fail addresses are to be performed;

a row repair block for determining whether the row addresses are fail and deciding whether row repair for the row addresses are to be performed depending on the output of the bit fail repair block; and

10 a plurality of column repair blocks for deciding whether column repair for the column addresses are to be performed and deciding whether a normal column driver must be selected, depending on the column address, column fuse boxes and an output signal of the bit fail repair block.

15 2. The repair circuit as claimed in claim 1, wherein the bit fail repair block comprises:

a plurality of first fuse boxes for receiving the column and row addresses;

20 a first fuse summation block for summing the outputs of the plurality of the fuse boxes;

a normal word line driver that operates depending on the output of the fuse summation block to select a normal word line; and

a bit repair word line driver that operates depending on the output of the fuse summation block to repair one bit.

3. The repair circuit as claimed in claim 1, wherein the row repair block comprises:

a plurality of second fuse boxes for receiving the row addresses;

5 a second fuse summation block for summing the outputs of the plurality of the fuse boxes;

a normal word line driver for enabling the normal word line depending on the output of the first fuse summation block and the output of the second fuse summation block; and

10 a repair word line driver for enabling the normal word line depending on the output of the first fuse summation block and the output of the second fuse summation block.

4. The repair circuit as claimed in claim 1, wherein each of the plurality of the column repair blocks comprises:

15 a column fuse box for receiving the column addresses;

a repair column select unit for selecting column repair depending on the output of the column fuse box and the output of the first fuse summation block;

20 a plurality of normal column select units for selecting a normal column depending on the column addresses, the outputs of the column fuse boxes and the output of the first fuse summation block;

a plurality of bit repair column select units for selecting a bit repair column depending on the output of the first fuse summation block and the output of the first fuse box;

a repair column driver for selecting a repair column depending on the output of the repair column select unit; and

a normal column driver for selecting a normal column and a bit repair column depending on the outputs of the normal column select units and the
5 repair column select units.

5. The repair circuit as claimed in claim 2, wherein the first fuse summation block receives the outputs of the plurality of the first fuse boxes as inputs, and wherein if one of the inputs has a value different from the other
10 inputs, its output value is decided by a value different from the value of the one input.